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(12) United States Patent Joye et al.

(54) SYSTEMS AND METHODS FOR DEPLOYING A LUMINAL PROSTHESIS

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OVER A CARINA

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(57) ABSTRACT

A system for deploying a prosthesis over a Carina between an ipsilateral lumen and a contralateral lumen includes a guidewire, a guidewire capture catheter, a self-expanding tubular prosthesis, and a delivery catheter. The guidewire is first placed in the ipsilateral lumen. The guidewire capture catheter is then advanced from the contralateral lumen to a position at or above the ipsilateral lumen. The guidewire is typically advanced through an occlusion, which may be a total occlusion, and captured by a capture element on the guidewire capture catheter. The guidewire capture catheter pulls the guidewire out through the contralateral side, and the guidewire is used to advance a delivery catheter from the ipsilateral side. The delivery catheter delivers a first segment of the tubular prosthesis in the ipsilateral lumen and a second segment of the prosthesis in the contralateral lumen.

35 Claims, 13 Drawing Sheets

